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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,345	03/24/2004	Hidegori Toyose	Q80519	3494
23373	7590	12/15/2005	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			ADDISU, SARA	
			ART UNIT	PAPER NUMBER
			3722	

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

TWN

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/807,345	TOYOSE, HIDENORI	
	Examiner Sara Addisu	Art Unit 3722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### **Status**

- 1) Responsive to communication(s) filed on 18 August 2005.
- 2a) This action is FINAL.                                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **Disposition of Claims**

- 4) Claim(s) 1-4 and 6-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-4 and 6-14 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### **Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 24 March 2004 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### **Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### **Attachment(s)**

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date _____. 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6) <input type="checkbox"/> Other: _____.
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## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments filed 8/18/05 have been fully considered but they are not persuasive.

1. In response to Applicant's argument (page 6, lines 9-11) that "Hessman et al discloses a cutter body having an adjustable insert holder, but does not disclose a sealed adjustment screw or sealed second screw for fixing the cartridge to the cutter body member as required by the present claims", Examiner points out that Hessman et al. was not used to teach a sealed adjustment screw. Ueno ('842) was used to teach a sealed adjustment screw.
2. In response to Applicant's argument (page 7, lines 3-5) that "Thus, it would not have been obvious to seal the wrench reception socket of Hessman et al to prevent drawing-out of the screw as taught by Ueno. because this would defeat the purpose of the adjustment screw in the milling cutter of Hessman et al.", Examiner respectfully points out that the modified device of Hessman et al. would be tamper proof since it is sealed with a resin-made embedding material, which read on the claim 1 (filed 3/24/04) which recites "..wherein one or both of a wrench reception socket of the fastened second screw and a wrench reception

socket of the adjustment-completed adjustment screw is sealed". The amended claim 1 (filed 8/18/05) recites "... wherein one or both of a wrench reception socket of the fastened second screw and a wrench reception socket of the adjustment-completed adjustment screw is sealed and the sealed wrench reception socket of said second and/or adjustment screw can be unsealed for readjustment and resealed as needed." Examiner points out that, it is well known in the art to apply heat to resin-made material to turn it into a molten state as evidenced by Lemelson ('874, Col. 1, lines 19-24) (in the case of the instant application, this known method would unseal the wrench reception socket).

3. In response to Applicant's argument (page 8, lines 3-5) that "...and the Examiner's assertion that it is well known to choose from a vast variety of fasteners having a variety of wrench reception sockets also does not disclose this aspect of the invention", Examiner reasserts the fact that as long as the fastener being used meets the requirement for the application such as fatigue strength, pitch, size, grip length, torque requirements and other specification, selecting the type of wrench reception sockets the fastener has based on operators preference is old and well known. An example of a fastener/screw having a wrench reception socket that does not fit an Allen wrench, a Phillips screwdriver or a flat-tip screwdriver is TORX (as evidenced by Capuano, USP, 4,459,074, figures 1 and 3 and Col. 2, lines 1-10. Also look at Brugola, USP 5,577,871, figure 3 and Col. 4, lines 7-11).

***Specification***

- The abstract of the disclosure is objected to because it is in claim format.

Correction is required. See MPEP § 608.01(b).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 and 6-14 are finally rejected under 35 U.S.C. 103(a) as being unpatentable over Hessman et al. (U.S. Patent No. 5,667,343) in view of Ueno (U.S. Patent No. 6,634,842) and further in view of Lemelson (U.S. Patent No. 4,318,874).

Hessman et al. teaches a milling cutter having a cassette (cartridge) (4) for removably supporting diamond coated cutting insert (i.e. cutting edge of formed of diamond) (5) with the use of fastening screw (11) (Col. 5, lines 17-18). Hessman et al. also teaches the cassette being fixed in the groove (3) of the cutter body member using fastening screw (6 & 7). Furthermore, Hessman et al. teaches the use of tap (8) for

adjusting the position of the cartridge (see Figure1 and Col. 3, lines 64-67). The milling cutter of Hessman et al.'s invention is capable of being used to cut an aluminum workpiece.

However, Hessman et al. fails to teach wrench reception socket of the fastening screws (for attaching cassette to tool and the adjustment screw) being sealed.

Ueno teaches hexagon recess portion of a screw (33c), which is a wrench-receiving socket (Col. 12, lines 31-34) sealed by resin-made embedding material (Col. 9, line 1). Ueno also teaches a screw (see Figures 7, 8a and 8b) having a wrench reception socket that is narrowed toward an opening (34d) that it is at the bottom of the recess (34f). Regarding claim 1, it is well known in the art to apply heat to resin-made material to turn in it into a molten state (in the case of the instant application, this known method would unseal the wrench reception socket), as evidenced by Lemelson ('874, Col. 1, lines 19-24).

Regarding claim 3, Cambridge International Dictionary of English defines roughen as "uneven or not smooth". Ueno teaches in Figure 14a & 14b recess portion (37c) having a projection (P: see figure below) that causes the inner surface of the wrench reception socket/recess to be uneven/not smooth (i.e. roughened), consequently forming engagement portion (37f) (i.e. this frictional engagement means provides an anchoring effect for the resin) ('842, Col. 15, lines 40-48).

Regarding the type of wrench reception socket claimed in claim 6, Examiner has taken Official Notice that it is well known in the art to choose from a vast variety of fasteners with a variety of wrench reception sockets. Examiner reasserts the fact that as

long as the fastener being used meets the requirement for the application such as fatigue strength, pitch, size, grip length, torque requirements and other specification, selecting the type of wrench reception sockets the fastener has based on operators preference is old and well known. An example of a fastener/screw having a wrench reception socket that does not fit an Allen wrench, a Phillips screwdriver or a flat-tip screwdriver is TORX (as evidenced by Capuano, USP, 4,459,074, figures 1 and 3 and Col. 2, lines 1-10. Also look at Brugola, USP 5,577,871, figure 3 and Col. 4, lines 7-11).

N.B. The use of TORX bolt in a manufacturing environment would make it less likely to be tampered with.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to sealed the wrench reception socket of Hessman et al.'s fastener by resin-made embedding material as taught by Ueno for the purpose of preventing drawing-out of the screw ('842, Col. 1, lines 10-15) (i.e. to make tamper proof).

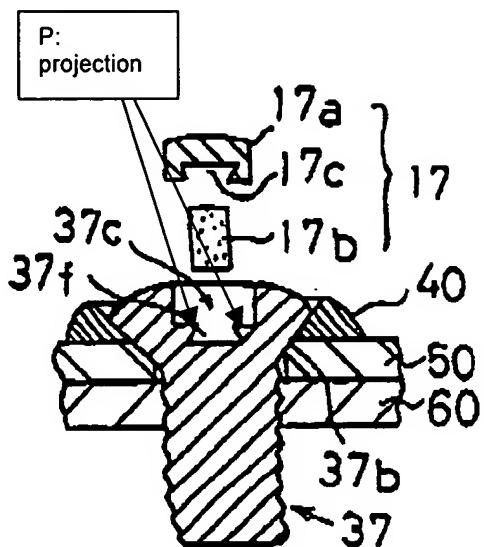
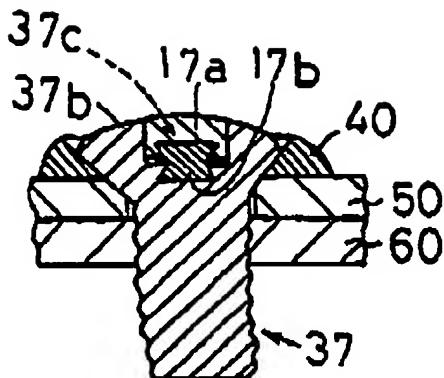


FIG. 14(a)



**FIG. 14(b)**

## **Conclusion**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sara Addisu at (571) 272-6082. The examiner can normally be reached on 8:30 am - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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*SA*  
*12/2/05*

  
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PRIMARY EXAMINER